

In re Patent Application of:
GREGG, ET AL.
Serial No. 09/680,721
Filed: OCTOBER 6, 2000

2. (Amended) A backerboard sheet according to Claim 1 wherein said at least one moisture-resistant resin face layer comprises fibers.

3. (Amended) A backerboard sheet according to Claim 2 wherein said fibers are arranged in a mesh.

4. A backerboard sheet according to Claim 2 wherein said fibers comprise at least one of glass, plastic, and metal.

5. (Amended) A backerboard sheet according to Claim 2 wherein said at least one moisture-resistant resin face layer further comprises a moisture-resistant resin material adjacent said fibers.

6. (Amended) A backerboard sheet according to Claim 1 wherein said at least one moisture-resistant resin face layer comprises first and second moisture-resistant resin face layers on respective first and second major surfaces of said core.

7. A backerboard sheet according to Claim 1 wherein said core has a generally rectangular shape defining a pair of opposing side edges and a pair of opposing end edges.

8. A backerboard sheet according to Claim 7 wherein the first major surface has beveled portions adjacent respective opposing side edges.

In re Patent Application of:
GREGG, ET AL.
Serial No. 09/680,721
Filed: OCTOBER 6, 2000

23
9. (Amended) A backerboard sheet according to Claim 7 wherein said at least one moisture-resistant resin face layer extends around the opposing side edges.

10. A backerboard sheet according to Claim 9 wherein the opposing end edges of said core are exposed.

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11. (Amended) A backerboard sheet according to Claim 1 wherein said core comprises autoclaved aerated concrete having a density in a range of about 25 to 40 lbs./ft.³

12. A backerboard sheet according to Claim 1 wherein said core has a thickness in a range of about 1/4 to 1 inch.

13. A backerboard sheet according to Claim 1 wherein said core further comprises reinforcing fibers in said aerated concrete.

14. A backerboard sheet according to Claim 1 wherein said core has a generally rectangular shape having a width in a range of about three to five feet.

15. A backerboard sheet according to Claim 1 wherein said core has a generally rectangular shape with a length in a range of about five to sixteen feet.

16. A backerboard sheet according to Claim 1

In re Patent Application of:
GREGG, ET AL.
Serial No. 09/680,721
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wherein said core comprises:

first and second portions aligned in end-to-end
relation at respective opposing edges thereof; and
an adhesive layer joining the opposing edges of said
first and second portions together.

17. (Amended) A backerboard sheet for moist areas
and comprising:

a core having opposing first and second major
surfaces;

said core comprising a monolithic body of autoclaved
aerated concrete; and

at least one moisture-resistant face layer on at
least one of the first and second major surfaces of said core,
said at least one moisture-resistant face layer comprising
fibers and a moisture-resistant resin material adjacent
thereto.

18. (Amended) A backerboard sheet according to
Claim 17 wherein said fibers comprise at least one of glass,
plastic, and metal fibers.

Cancel Claim 19.

20. A backerboard sheet according to Claim 17
wherein said at least one moisture-resistant face layer
comprises first and second face moisture-resistant layers on
respective first and second major surfaces of said core.

21. A backerboard sheet according to Claim 17

In re Patent Application of:
GREGG, ET AL.
Serial No. 09/680,721
Filed: OCTOBER 6, 2000

wherein said core has a generally rectangular shape defining a pair of opposing side edges and a pair of opposing end edges.

22. A backerboard sheet according to Claim 21 wherein the first major surface has beveled portions adjacent respective opposing side edges.

23. A backerboard sheet according to Claim 21 wherein said at least one moisture-resistant face layer extends around the opposing side edges.

24. A backerboard sheet according to Claim 21 wherein the opposing end edges of said core are exposed.

25. A backerboard sheet according to Claim 17 wherein said core comprises autoclaved aerated concrete having a density in a range of about 25 to 40 lbs./ft.³

26. A backerboard sheet according to Claim 17 wherein said core has a thickness in a range of about 1/4 to 1 inch.

27. A backerboard sheet according to Claim 17 wherein said core further comprises reinforcing fibers in said autoclaved aerated concrete.

28. A backerboard sheet according to Claim 17 wherein said core comprises:

first and second portions aligned in end-to-end relation at respective opposing edges thereof; and

In re Patent Application of:
GREGG, ET AL.
Serial No. 09/680,721
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an adhesive layer joining the opposing edges of said first and second portions together.

Please cancel Claims 29-38.

Please cancel Claims 39-53 directed to the non-elected invention (of course, Applicants reserve the right to file one or more divisional applications directed to the subject matter thereof).

Please add the following new Claims 54-64.

54. (New) A backerboard sheet for moist areas and comprising:

a core having opposing first and second major surfaces;

said core consisting essentially of autoclaved aerated concrete; and

at least one moisture-resistant resin face layer on at least one of the first and second major surfaces of said core, said at least one moisture-resistant resin face layer being substantially continuous and blocking moisture penetration to said core.

55. (New) A backerboard sheet according to Claim 54 wherein said at least one moisture-resistant resin face layer comprises fibers.

56. (New) A backerboard sheet according to Claim 55 wherein said fibers comprise at least one of glass, plastic,

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GREGG, ET AL.
Serial No. 09/680,721
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and metal.

57. (New) A backerboard sheet according to Claim 55 wherein said at least one moisture-resistant resin face layer further comprises a moisture-resistant resin material adjacent said fibers.

58. (New) A backerboard sheet according to Claim 54 wherein said at least one moisture-resistant resin face layer comprises first and second moisture-resistant resin face layers on respective first and second major surfaces of said core.

59. (New) A backerboard sheet according to Claim 54 wherein the autoclaved aerated concrete has a density in a range of about 25 to 40 lbs./ft.³

60. (New) A backerboard sheet according to Claim 54 wherein said core has a thickness in a range of about 1/4 to 1 inch.

61. (New) A backerboard sheet for moist areas and comprising:

a core having opposing first and second major surfaces;

said core consisting essentially of autoclaved aerated concrete; and

at least one moisture-resistant face layer on at least one of the first and second major surfaces of said core, said at least one moisture-resistant face layer comprising

In re Patent Application of:
GREGG, ET AL.
Serial No. 09/680,721
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fibers and a moisture-resistant resin material adjacent thereto.

62. (New) A backerboard sheet according to Claim 61 wherein said fibers comprise at least one of glass, plastic, and metal fibers.

63. (New) A backerboard sheet according to Claim 61 wherein said at least one moisture-resistant face layer comprises first and second face moisture-resistant layers on respective first and second major surfaces of said core.

64. (New) A backerboard sheet according to Claim 61 wherein the autoclaved aerated concrete has a density in a range of about 25 to 40 lbs./ft.³

REMARKS

Applicants thank the Examiner for the careful and thorough examination of the present application. By this amendment, Claims 1 and 17 have been amended to further clarify the presnet invention. Various dependent claims have been amended for consistency and to eliminate minor informalities. Claims 19 and 29-53 have been canceled. New Claims 54-64 have been added. Claims 1-18, 20-28 and 54-64 are now pending in the application. Favorable reconsideration is respectfully requested.

I. The Invention

As shown in FIGS. 6-9, for example, the disclosed invention is directed to to a lightweight, high-strength,